



# **Certificate of Analysis**

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MRS 2905 **Product Name:** Catalog No.: 5633 Batch No.: 5

**IUPAC Name:** 2-Thiouridine-5'-O-( $\alpha$ ,  $\beta$ -methylene)diphosphate trisodium salt

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{10}H_{13}N_2Na_3O_{10}P_2S$ 

**Batch Molecular Weight:** 484.2

**Physical Appearance:** lyophilised solid Solubility: water to 45 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC**: Shows 100.0% purity Consistent with structure Mass Spectrum:

Tel: +44 (0)1235 529449 www.tocris.com/distributors Tel:+1 612 379 2956



## **Product Information**

Print Date: Mar 13th 2024

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Product Name: MRS 2905 Catalog No.: 5633 5

IUPAC Name: 2-Thiouridine-5'-O- $(\alpha, \beta$ -methylene)diphosphate trisodium salt

#### **Description:**

MRS 2905 is a potent and selective P2Y<sub>14</sub> receptor agonist (EC<sub>50</sub> = 0.92 nM). Exhibits >2000-fold selectivity over P2Y<sub>6</sub>.

#### **Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{10}H_{13}N_2Na_3O_{10}P_2S$ 

Batch Molecular Weight: 484.2

Physical Appearance: lyophilised solid

**Minimum Purity**: ≥98%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

### Solubility & Usage Info:

water to 45 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Lazarowski** *et al* (2015) UDP-sugars as extracellular signaling molecules: cellular and physiologic consequences of P2Y<sub>14</sub> receptor activation. Mol.Pharmacol. *88* 151. PMID: 25829059.

**Das** *et al* (2010) Human P2Y<sub>14</sub> receptor agonists: truncation of the hexose moiety of uridine-5'-diphosphoglucose and its replacement with alkyl and aryl groups J.Med.Chem. *53* 471. PMID: 19902968.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use